

Field Inspection for Phytosanitary Certification Manual



2006 FIELD INSPECTION FOR PHYTOSANITARY CERTIFICATION

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I. INTRODUCTION:

The purpose of field inspection is to survey parent seed crops during the growing season for diseases and pests of concern to Idaho and other states or country(s) of destination.

Most importing countries require field inspections during the growing season for phytosanitary certification.

Seed lots intended for export should be submitted for field inspection.

II. BASIC INSPECTION POLICIES:

NO INSPECTIONS WILL BE CONDUCTED DURING THE RESTRICTED ENTRY INTERVAL (REI) FOLLOWING A PESTICIDE APPLICATION. It is the responsibility of the person or company submitting the application (map) to notify the Idaho State Department of Agriculture (ISDA) of pesticide applications that have an REI by calling the Boise office at (208) 332-8620 or the Twin Falls office at (208) 736-2195.

It is the applicant's responsibility to request inspection for specific diseases that may be of phytosanitary significance to the state or country of destination.

Field inspection will be done for requested diseases not specifically listed in this booklet if:

- **The applicant provides information on field disease symptoms, inspection procedures (optimum time for inspection, etc.)**
- **Seed or plant pathology isolation and identification procedures are available from a reliable source.**
- **Applicant may be required to pay the costs incurred for laboratory testing for diseases, pests and/or virus's not listed in this publication.**

Applicant will be notified if the field inspection cannot be conducted.

Listed under each crop are the diseases the ISDA will routinely inspect for. These are referred to as **default diseases**. Do not include default diseases in the list of diseases to be inspected for on the application (map).

- 2 **Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).**

Also included under each default disease list is a list of diseases of phytosanitary concern to many countries where Idaho seed is routinely exported.

Countries often amend their requirements and the "general disease" list cited for each crop may become outdated and/or incomplete at any time.

For small seed, especially early maturing varieties, contact the ISDA with the approximate harvest date or note it on the application (map) so the inspection can be completed prior to harvest.

If a field cannot be located, it may be necessary for a company representative to take an ISDA inspector to the field.

It is the applicant's responsibility to ensure that the grower is aware that an inspector will inspect their field during the growing season.

- If the inspector encounters a grower who does not want them to inspect their field, inspector will leave and applicant will be contacted to make necessary arrangements for inspection.

Inspectors will wear rubber boots (mid-thigh) to minimize contact with foliage.

- Boots will be disinfected with a ten percent (10%) Clorox solution between inspected fields to reduce chance of inadvertently carrying any diseases to another field.

All fields submitted for phytosanitary inspection will be walked at least once during the growing season.

Some crops may need to be inspected more than once for a particular disease during the growing season to ensure inspection at the optimum time of disease expression.

- These diseases must be specifically requested on the application (map) form.
- In cases where multiple inspections are required, an additional inspection fee per acre will be charged.

Any fields **suspected** of being infected with a requested disease of phytosanitary significance will be sampled.

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

Samples will be analyzed at the ISDA Plant Pathology Laboratory.

- The applicant will be notified as soon as possible if a sample is positive for a requested disease of phytosanitary significance.

III. APPLICATIONS FOR FIELD INSPECTION (MAPS):

Applications (maps) may be obtained from ISDA and must be submitted prior to the deadlines listed below. Early applications (maps) will be appreciated. See page 28 of this manual or visit our website at <http://www.idahoag.us> for contact information.

Alfalfa-----	May 1
Peas -----	May 1
Mint -----	May 1
Lettuce, radish, onion-----	May 15
Beans (Trial Ground Requests)-----	May 20
Other small seeds -----	June 10
Vine Crops -----	June 10
Corn seed for export to Australia -----	June 10
Beans-----	July 1
Corn-----	July 1
Hops -----	July 1
Potatoes -----	July 1
Special Field Inspection Request -----	Call ISDA
for submission deadline information	

Late applications (maps) **WILL NOT** be accepted, except as replacement acres, and only on an "as-able-to-do" basis.

- **For beans only**, applications are due July 1. Applications received after the July 1 deadline will be subject to a late application fee (See Section V. Inspection Fees, see page 6). Applications for additional or substitute acreage may be submitted until September 1 and will be accepted on a case by case basis. The cost of inspection will be determined by the Director.

White and yellow copies of applications (maps) must be submitted.
Pink copy is for the applicant's records.

Computer generated applications (maps) must be pre-approved by ISDA. When approved, a printed white copy and a yellow copy must be submitted.

- 4 **Note:** Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

Applications (maps) must be complete, accurate, and **signed** by a company representative.

Applications (maps) must have:

- Complete written directions.
- Detailed map showing at least the nearest crossroads and distance from that point to the field (If possible, note crops in neighboring fields).
- One (1) seed company.
- One (1) species.
- One (1) seed variety.
- One (1) seed lot number.
- One (1) grower.
- Area number (**Area numbers are defined on page 6. Do not list city or county names in area number space**).
- County where the field is located.
- Number of fields to be inspected.
- Grower's phone number.
- Field Representative's name and phone number.

Area Pea and Area Corn Inspection: Lists shall be submitted using company letterhead and must contain the following:

- Variety
- Lot number
- Grower name
- Acres
- Area number (**Area numbers are defined on page 6**)
- County

Note: A minimum of two hundred (200) acres per company per designated inspection area must be submitted to be eligible for an area inspection. Applicants submitting under two hundred (200) acres within a designated inspection area must do so pursuant to the guidelines for individual inspection of Peas on page 19 and individual inspection of corn on page 17.

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

IV. INSPECTION AREAS AS DEFINED IN THE PHYTOSANITARY AND POST-ENTRY CERTIFICATION RULES:

The landmass of the state has been divided into 14 “inspection areas” to facilitate the inspection of all seed-producing localities and to confine the loci of disease infections when they arise.

These areas shall be numbered serially and the boundaries of each shall remain fixed as described below.

The cultural conditions (i.e., weather, elevation, soil type and general farming practices) are relatively uniform within each area; therefore, the disease content of the seed produced within each respective area may be expected to be uniform.

AREAS:

- 1 - Kootenai County.
- 2 - Benewah County.
- 3 - That portion of Latah County above 2,000 feet elevation and that portion of Nez Perce County north of the Clearwater River and above 2,000 feet elevation.
- 4 - That portion of Latah County below 2,000 feet elevation and all of the Clearwater River and Nez Perce County below 2,000 feet elevation.
- 5 - Lewis County.
- 6 - Canyon, Ada, Owyhee, Payette, Washington, and Gem Counties.
- 7 - Gooding, Jerome, Lincoln, and Elmore Counties.
- 8 - Twin Falls County.
- 9 - Cassia County.
- 10 - That portion of Minidoka County lying south of the main line of the Union Pacific Railroad.
- 11 - That portion of Minidoka County lying north of the main line of the Union Pacific Railroad.
- 12 - Bingham, Bonneville, Power, and Bannock Counties.
- 13 - Jefferson, Madison, Fremont, Teton, Clark and Butte Counties.
- 14 - All other agricultural areas of the state not specifically designated above.

6 **Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).**

V. INSPECTION FEES:

BEANS ONLY: Fees and charges under IDAPA 02.06.06 - Rules Governing the Planting of Beans, (*Phaseolus spp.*), in Idaho are:

Tags: Green tags or Yellow tags for In-State Planting purposes - Eighteen cents (\$0.18) per hundredweight.

Applications:

Application for Field Inspection - Five dollars (\$5) each.

Late Application for Field Inspection (Applications for bean field inspection received after July 1) - Ten dollars (\$10) each

Field and Windrow Inspections:

Active Growth Inspection for seed from west of the United States Continental Divide - Three dollars and fifty cents (\$3.50) per acre, per inspection.

Trial Ground Acreage Inspection for seed from east of the United States Continental Divide or foreign country - Ten dollars (\$10.00) per acre, per inspection. A minimum of five (5) inspections will be performed including an inspection during the windrow.

Windrow Inspection when done by the ISDA - Three dollars and fifty cents (\$3.50) per acre.

Exception: If applicant supplies its own employees and transportation to carry out the required windrow inspections under ISDA supervision, the fees shall be pro-rated as follows:

- Seed company supplies one (1) employee and transportation, windrow inspection fee will be two dollars (\$2.00) per acre;
- Seed company supplies two (2) employees and transportation, windrow inspection fee will be one dollar and fifty cents (\$1.50) per acre;
- Seed company supplies three (3) employees and transportation, windrow inspection fee will be one dollar (\$1.00) per acre;
- Seed company supplies four (4) or more employees and transportation, no acreage inspection fees will be charged.

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

Windrow inspections performed after hours, on weekends or holidays will be charged at cost plus mileage.

Bean Serology Testing:

Official Sample: Twenty dollars (\$20.00) per sample.

Sample Size Requirements: Sample size requirements for imported seed requiring a serology test will be as follows.

LOT SIZE	SAMPLE SIZE
<10 pounds	Negotiable
10 - 14 pounds	0.5 pounds
15 - 25 pounds	1.0 pounds
26 - 50 pounds	1.5 pounds
51 - 200 pounds	2.0 pounds
201 - 1,000 pounds	3.0 pounds
>1,000 pounds	5.0 pounds for every 10,000 pounds or portion thereof

(Treated seed will not be eligible for serology testing)

Plant Pathology Laboratory Services: Fees will be charged at current rates and are available upon request.

Confirmation of the identity of the causal organism by the University of Idaho plant pathologists: The party disputing the ISDA's determination of the presence of a regulated pest will be responsible for the payment of fees charged by the University of Idaho.

- Confirmation is based solely on the official sample (or laboratory culture derived therefrom) as drawn by ISDA for initial determination.

MINT ONLY: Fees and charges for inspections under IDAPA 02.06.18 - Rules Governing Mint Rootstock and Clone Production are:

Transfer Certificates: For in-state sale or movement of rootstock - Ten dollars (\$10) per certificate.

Applications: Applications for field inspection - Five dollars (\$5) each.

- 8 **Note:** Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

Field Inspections: Field inspection, collection of samples and examination of samples shall be assessed at five dollars (\$5) per acre, per inspection.

FOR ALL OTHER CROPS: Fees and charges for inspections under IDAPA 02.06.04 - Phytosanitary and Post-Entry Certification Rules are:

Area Inspections (Peas and Corn only): Fourteen cents (\$0.14) per hundredweight. Fee is collected at the time phytosanitary certification is requested for each shipment.

Applications: Applications for field inspection - Five dollars (\$5) each.

Field or Lot Inspections: Acreage Inspection Fee - Three dollars and fifty cents (\$3.50) per acre, per inspection.

- A minimum of fifty dollars (\$50.00) per inspection will be charged when the total acreage submitted by any one (1) applicant is fifteen (15) acres or less.

Special Project Fee. Special projects not covered by existing fee schedule may be billed at twenty-five dollars (\$25) per hour with a minimum twenty-five dollar (\$25) fee. Special projects, include but are not limited to, research, lot history verification, data entry, sales and purchases, transfer of lots into ISDA database, ISDA training of private company personnel or any other circumstance approved by the Director.

VI. CROPS INSPECTED:

ALFALFA: To be eligible for a State Field Inspection Certificate, all fields must be turned in for individual field inspection.

Fields will be walked in an hourglass pattern covering at least three borders and an "X" pattern through the field covering areas of increased plant stress and greater possibility of disease occurrence.

Alfalfa fields will be inspected once during the growing season for the following default diseases:

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

Alfalfa mosaic *alfamovirus* (AMV)

- | | |
|--------------------------|--|
| synonym: | alfalfa mosaic |
| synonym: | lucerne mosaic virus |
| synonym: | potato calico virus |
| ➤ Bacterial leaf spot | <u>Xanthomonas campestris</u> pv. <u>alfalfae</u> |
| ➤ Bacterial wilt | <u>Clavibacter michiganensis</u> subsp. <u>insidiosum</u> |
| synonym: | <u>Corynebacterium michiganensis</u> pv. <u>insidiosum</u> |
| synonym: | <u>Corynebacterium insidiosum</u> |
| ➤ Dodder | <u>Cuscuta</u> spp. |
| ➤ Leafy spurge | <u>Euphorbia esula</u> |
| ➤ Stem and bulb nematode | <u>Ditylenchus dipsaci</u> |
| ➤ Summer blackspot | <u>Cercospora medicaginis</u> |
| ➤ Verticillium wilt | <u>Verticillium albo-atrum</u> AND <u>Verticillium dahliae</u> |

The following are **not known to occur** in Idaho on alfalfa. Some countries may still require active growth field inspections for these pests. ***Disease must be specifically listed on the field inspection application (map) form to be inspected for in the field.**

- | | |
|---------------------------|--|
| *Broomrape | <u>Orobanche</u> spp. |
| *Mouse-ear hawkweed | <u>Heiracium pilosella</u> |
| *Pierce's disease (dwarf) | <u>Xylella fastidiosa</u> |
| *Witchweed | <u>Striga</u> spp., including <u>Striga asiatica</u> |

Currently, seed exported to Argentina requires freedom from the following pest. Some import permits from Argentina have allowed an official laboratory test to fulfill this requirement. ***Disease must be specifically listed on the field inspection application (map) form to be inspected for in the field.**

- | | |
|-----------------|--------------------------|
| *Canada thistle | <u>Cirsium arvense</u> . |
|-----------------|--------------------------|

ALFALFA EXPORTS TO EUROPEAN UNION COUNTRIES (EUN):

The following information must be provided for alfalfa seed intended for export to EUN countries.

Notation on application that inspection for export to any EUN countries is requested.

Field history of at least three years prior to sowing of the current alfalfa crop.

- 10 **Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).**

Number of concurrent years in alfalfa and number of seed crops harvested from this field.

Location of any “adjacent” alfalfa fields, including acreage, whether or not for seed production.

- If a submitted seed field is adjacent to another alfalfa field, that adjacent field shall also be inspected and the company will be billed accordingly.
- **The term adjacent does not apply to fields that have a physical barrier between them such as a gravel road, ditch or irrigation canal.**

EUN field number assigned by ISDA for the field if the field has been submitted for EUN inspection in previous years.

BEAN SEED FOR PLANTING IN IDAHO: Summary requirements for beans planted in Idaho under IDAPA 02.06.06 - Rules Governing the Planting of Beans, (*Phaseolus spp.*), in Idaho (Green Tag Program).

For specific details of this program, refer to the above mentioned rules. Copies may be obtained from either the Boise or Twin Falls offices or the ISDA Homepage (<http://www.idahoag.us>).

Fields will be walked at approximately 15-row intervals during active growth and at approximately 1-3 row intervals in windrow.
Rill or furrow irrigated bean fields will be inspected at least once during the growing season and at least once in windrow.
Sprinkler irrigated bean fields will be inspected at least twice during the growing season and at least once in windrow.

Tag Requirement: Bean seeds to be planted in Idaho shall be from an approved lot **bearing** an approved tag on **each** bag or container, stating kind, variety and lot number. The following is a list of approved planting tags:

- ISDA in-state planting tag (green tag)
- ISDA approved tag (yellow tag)
- ICIA tag, **provided** the lot was field and windrow inspected by ICIA in accordance with ISDA rules
- Oregon Department of Agriculture inspection tag (Malheur County only), **provided** the lot was field and windrow inspected in accordance with ISDA rules.

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

All bean seed submitted under this program will be inspected for the following default diseases:

- Anthracnose Colletotrichum lindemuthianum
synonym (teleomorph): Glomerella lindemuthiana

The following four default diseases are included in the “Bacterial Blights” inspection:

- Bacterial wilt Curtobacterium flaccumfaciens pv. flaccumfaciens
synonym: Corynebacterium flaccumfaciens
- Brown spot Pseudomonas syringae pv. syringae
synonym: Pseudomonas syringae
- Common blight *and / or* Fuscus blight Xanthomonas axonopodis pv. phaseoli
synonym: Xanthomonas campestris pv. phaseoli
synonym: Xanthomonas campestris pv. fuscans
synonym: Xanthomonas campestris pv. phaseoli var. fuscans
synonym: Xanthomonas phaseoli
- Halo blight Pseudomonas savastanoi pv. phaseolicola
synonym: Pseudomonas syringae pv. phaseolicola
synonym: Pseudomonas phaseolicola

Each Application (map) Submitted Must Have:

- One (1) approved inspection tag corresponding to the variety and lot number listed on application must be attached to each application submitted. **NOTE:** An ISDA in-state planting tag (green tag); ISDA approved tag (yellow serology tag), ICIA inspection tag, or Malheur County, Oregon inspection tag, **must** also be attached to **each bag of seed** giving kind, variety, and lot number.
- Parent seed lot numbers.
- Parent planting certificate numbers (State numbers).
- Diseases to be inspected for (beyond those listed above or under “Bean Seed for Export” on page 16).
- Failure to maintain true identity of any seed lot intended for seed purposes will automatically disqualify the lot for future planting in Idaho and State Field Inspection Certificates.

12 **Note:** Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

Pintos, Red Mexicans, Pinks, Great Northerns, Small Whites, Navy Beans, Black Turtles, and Lima Beans:

- First generation of seed grown in Idaho must be grown and inspected under rill irrigation.
- Thereafter, the seed may be grown and inspected for two (2) consecutive generations in Idaho under sprinkler irrigation.
- Seed grown under sprinkler irrigation for two (2) consecutive generations shall then be grown and inspected for one (1) generation in Idaho under rill irrigation.

All Other Beans:

- First generation of seed grown in Idaho must be grown and inspected under rill irrigation.
- Thereafter, the seed may be grown and inspected for one (1) generation in Idaho under sprinkler irrigation.
- Any time seed has been grown and inspected for one (1) generation in Idaho under sprinkler irrigation and prior to planting the seed under sprinkler irrigation or rill irrigation in Idaho, the seed must be sampled and laboratory tested by the Department in Idaho and found negative for the regulated pests.
- Following a second consecutive planting of the seed under sprinkler irrigation in Idaho, the seed must be sampled and laboratory tested by the Department in Idaho and found negative for the regulated pests.
- After meeting the above requirements, the seed must be grown and inspected for one (1) generation in Idaho under rill irrigation.

Malheur County, Oregon grown seed must be from a lot inspected in the growing season and in the windrow for the regulated pests of quarantine significance in Idaho (See page 12) and tagged by the Oregon Department of Agriculture.

Imported bean seed which has passed ISDA serology tests and has been tagged with an ISDA approved tag (yellow tag) may not be planted under sprinkler irrigation (See page 15 for Imported Bean Seed Requirements).

During thrashing time emergencies, the Director may authorize qualified personnel to perform windrow inspections under the supervision of ISDA.

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

When fields are cut, ISDA (Twin Falls or Boise office) **must be notified in writing** of the date the field was cut and probable thrash/harvest date in order to allow enough time for the windrow inspection prior to thrashing.

General Trial Ground Requirements: Summary requirements for beans planted in Idaho under IDAPA 02.06.06 - Rules Governing the Planting of Beans (*Phaseolus spp.*), in Idaho.

For specific details of this program, refer to the above mentioned rules. Copies may be obtained from either the Boise or Twin Falls offices or the ISDA Homepage (<http://www.idahoag.us>).

Technically trained personnel approved by the Director of the ISDA, and the ISDA shall jointly supervise trial grounds.

Land shall be owned or leased. If leased, a copy of the lease shall accompany the application (map).

More than one (1) trial ground may be approved provided that a separate application is submitted and each trial ground meets the requirements in Idaho.

Any machinery used in the production of bean seed on trial grounds must be disinfected to the satisfaction of the Director, prior to movement to other bean fields.

Trial grounds shall not be planted under sprinkler irrigation.

During each growing season there will be a minimum of four (4) active growth inspections and one (1) windrow inspection.

Trial Ground Applications: A written request for trial ground must be submitted to the Director for approval prior to May 20 of the year the bean seed will be planted and must contain:

- Name of person in charge.
- Geographic Location
- Size of trial ground.
- Detailed varietal planting plan. If the original planting plan is changed, the person in charge of the trial ground must notify the Director in writing.

14 **Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).**

- Detailed varietal planting plans must include: location, acreage, serology reports (if applicable), origin of seed and highlight the seed lots with origins outside of the state of Idaho, row numbers, stake numbers, and plot or block numbers.

Requests for In-State Planting Certificates (Green Tags):

Requests for in-state planting certificates (green tags) will be accepted only upon written request on company's official letterhead. No in-state planting certificates (green tags) will be issued for lots without an actual clean weight reported to the ISDA.

Green Tag Requests: Each request submitted must include:

- Variety name
- Seed lot number
- Planting certificate number (State number)
- Weight being tagged
- Size of the bag in pounds
- Number of tags required

Send all Green Tag requests to:

Idaho State Department of Agriculture
Division of Plant Industries
P.O. Box 401
Twin Falls, Idaho, 83303-0401
Phone (208) 736-2195
Fax (208) 736-2198.

Imported Bean Seed Grown West of the Continental Divide in the Contiguous United States to be Planted in Idaho:

Imported bean seed grown west of the Continental Divide in the contiguous United States must:

- Be accompanied by a phytosanitary certificate issued by the regulatory agency of the state of origin, listing the diseases the crop was inspected for, which must include the regulated pests of quarantine significance in Idaho (see page 12), and stating that the crop was field and windrow inspected.
- Seed lot shall successfully pass laboratory tests conducted by the ISDA from samples officially drawn in the state of Idaho by the ISDA.
- **Treated seed will not be eligible for serology testing.**
- Must bear an ISDA approved tag (yellow tag).

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

- Shall not be planted under sprinkler irrigation.
- **Each field planted in Idaho must be submitted for field and windrow inspections to the ISDA or the ICIA.**
- Lima beans, Pinto, Great Northern, Red Mexican and Pinks must also comply with the requirements listed above.

Imported Bean Seed Grown East of the Continental Divide in the Contiguous United States or of Foreign Origin: Imported bean seed grown east of the Continental Divide in the Contiguous United States or of foreign origin shall be planted **only** on an approved trial ground. (See page 14 for trial ground requirements).

BEAN SEED FOR EXPORT: To be eligible for state phytosanitary certification, bean fields must be turned in for individual field inspection. Eligibility for a State Field Inspection Certificate is based on the completion of field and windrow inspections for the lot and freedom from the regulated pests listed under **BEAN SEED FOR PLANTING IN IDAHO** on page 11.

All requirements for tagging and planting of bean seed must be followed as stated on pages 11 through 17 even if the crop produced will be exported or used for edible purposes.

All bean fields will be inspected for the following default diseases :

- Anthracnose Colletotrichum lindemuthianum
 synonym (teleomorph): Glomerella lindemuthiana

The following four default diseases are included in the “Bacterial Blights” inspection:

- Bacterial wilt Curtobacterium flaccumfaciens pv. flaccumfaciens
 synonym: Corynebacterium flaccumfaciens
- Brown spot Pseudomonas syringae pv. syringae
 synonym: Pseudomonas syringae
- Common blight *and / or* Fuscus blight Xanthomonas axonopodis pv. phaseoli
 synonym: Xanthomonas campestris pv. phaseoli
 synonym: Xanthomonas campestris pv. fuscans
 synonym: Xanthomonas campestris pv. phaseoli var. fuscans
 synonym: Xanthomonas phaseoli

16 **Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).**

- Halo blight Pseudomonas savastanoi pv. phaseolicola
 synonym: Pseudomonas syringae pv. phaseolicola
 synonym: Pseudomonas phaseolicola

CORN: To be eligible for a State Field Inspection Certificate, corn fields must be turned in for area or individual field inspection. **(For area inspected corn, refer to instructions on page 5)**

Corn fields submitted for individual inspection will be walked in an hourglass pattern covering at least three sides of the field (15-20 feet from the edge) and an “X” pattern through the field covering areas of increased plant stress.

Corn fields submitted for individual field inspection will be inspected for the following default diseases :

- Brown spot Physoderma maydis
 (aka Black spot, Stalk rot)
 synonym: Physoderma zeae-maydis
- Head smut Sporisorium holci-sorghii
 synonym: Sphacelotheca reiliana
 synonym: Ustilago reiliana
 synonym: Sorosporium reilianum
- Late wilt Cephalosporium maydis
- Maize dwarf mosaic *potyvirus*
 (Note: This does not include Sugarcane Mosaic (MDMV) strain B)

The following diseases are **known not to occur** in the state of Idaho. Corn fields submitted for individual inspection will be inspected for the following default diseases in addition to the default diseases listed above:

- Brown stripe downy mildew Sclerophthora rayssiae var. zeae
- Crazy top of corn Sclerophthora macrospora
 synonym: Sclerospora macrospora
- Eyespot Aureobasidium zeae
 synonym: Kabatiella zeae
- Green ear downy mildew Sclerospora graminicola
 synonym: Peronospora graminicola
- Goss's bacterial wilt Clavibacter michiganense pv. nebraskense
 synonym: Corynebacterium nebraskense
-

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

➤ Java downy mildew	<u>Peronosclerospora maydis</u>
synonym:	<u>Sclerospora maydis</u>
➤ Northern corn leaf spot	<u>Cochliobolus carbonum</u>
synonym:	<u>Helminthosporium carbonum</u>
synonym (anamorph):	<u>Bipolaris zeicola</u>
➤ Philippine downy mildew	<u>Peronosclerospora philippinensis</u>
synonym:	<u>Sclerospora philippinensis</u>
➤ Sorghum downy mildew	<u>Peronosclerospora sorghi</u>
synonym:	<u>Sclerospora sorghi</u>
➤ Southern corn leaf blight	<u>Cochliobolus heterostrophus</u>
synonym:	<u>Drechslera maydis</u>
synonym:	<u>Helminthosporium maydis</u>
synonym (anamorph):	<u>Bipolaris maydis</u>
➤ Spontaneum downy mildew	<u>Peronosclerospora spontanea</u>
synonym:	<u>Sclerospora spontaneum</u>
➤ Stewart's wilt	<u>Pantoea stewartii</u> subsp. <u>stewartii</u>
synonym:	<u>Erwinia stewartii</u>
synonym:	<u>Xanthomonas stewartii</u>
➤ Sugarcane downy mildew	<u>Peronosclerospora sacchari</u>
synonym:	<u>Sclerospora sacchari</u>
➤ Yellow leaf blight	<u>Ascochyta ischaemi</u>
synonym:	<u>Phyllosticta maydis</u>
synonym (teleomorph):	<u>Mycosphaerella zeae-maydis</u>

According to the USDA APHIS Plant Protection and Quarantine Service, Cornfield Inspection Manual: A Field Guide for the Phytosanitary Certification of Seed Corn for Export, the optimum time for inspection for some late season diseases is when the “crops approach maturity.”

A second field inspection for late season diseases will be required during the last portion of the growing season since the initial inspection is conducted between two weeks prior and two weeks following tasseling.

The following diseases will require a total of **two** inspections for late season diseases. These diseases are **known to occur** in Idaho.

***Disease must be specifically listed on the field inspection application (map) form to be inspected for in the field.** An additional inspection fee of \$3.50 per acre will be charged for the second required inspection.

*Common smut	<u>Ustilago zeae</u>
synonym:	<u>Ustilago maydis</u>
*Diplodia stalk rot	<u>Stenocarpella maydis</u>
synonym	<u>Diplodia maydis</u>

18 **Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).**

*Diplodia leaf streak	<u>Stenocarpella macrospora</u>
synonym:	<u>Diplodia macrospora</u>
*Dry ear rot	<u>Khuskia oryzae</u>
synonym	<u>Nigrospora oryzae</u>
*Fusarium stalk rot <i>and / or</i> Pink ear	
	<u>Fusarium moniliforme</u>
synonym (teleomorph):	<u>Gibberella fujikuroi</u>

CORN SEED EXPORTS TO AUSTRALIA:

Only approved Idaho exporters may submit corn seed fields to be inspected for export to Australia. Each application (map) must clearly state "Export to Australia." Fields must be planted according to the Australian Work Plan. Copies of the Work Plan are available from ISDA. In addition to the default diseases listed on pages 17, 18, and 19, the Australia fields will be field inspected and laboratory tested for the following diseases:

- Maize dwarf mosaic *potyvirus* strains
- (Note: This does not include Sugarcane Mosaic (MDMV) strain B)
- Wheat Streak Mosaic *potyvirus* (WSM)
- High Plains Virus (HPV)

PEAS: To be eligible for a State Field Inspection Certificate, pea fields must be turned in for area or individual field inspection. **(For area inspected peas, refer to instructions on page 5)**

Pea fields submitted for individual field inspection will be walked in an hourglass pattern covering at least three sides of the field (15-20 feet from the edge) and an "X" pattern through the field.

Areas of increased plant stress will be more closely examined since these are the areas where the possibility of disease expression increases.

Pea fields submitted for individual field inspection will be inspected once during the growing season for the following default disease:

- Bacterial blight Pseudomonas syringae pv. pisi

The following disease will require **two additional** active growth inspections during the season. ***Disease must be specifically listed on the field inspection application (map) form to be inspected for in the field.** An additional inspection fee of \$3.50 per

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

acre, per inspection, will be charged for the second and third required inspections.

***Pea seed-borne mosaic *potyvirus* (PSBMV)**

synonym:	Pea fizzle-top virus
synonym:	Pea leaf roll mosaic virus
synonym:	Pea leaf rolling mosaic virus
synonym:	Pea leaf rolling virus

Some countries may require a field inspection for the following diseases. ***Disease must be specifically listed on the field inspection application (map) form to be inspected for in the field.**

*Ascochyta blight	<u><i>Mycosphaerella pinodes</i></u>
synonym (anamorph):	<u><i>Aschochyta pinodes</i></u>
*Ascochyta leaf and pod spot	
	<u><i>Ascochyta pisi</i></u>
*Ascochyta foot rot and black stem	
	<u><i>Phoma pinodella</i></u>
synonym:	<u><i>Ascochochyta pinodella</i></u>
synonym:	<u><i>Phoma medicaginis</i> pv. <i>pinodella</i></u>

ALLIUM SPP. (Onion, Leek, Chives, Garlic, etc.): To be eligible for a State Field Inspection Certificate, Allium spp. fields must be turned in for individual field inspection.

All Allium spp. fields will be inspected by walking every ten to fifteen rows depending on field size.

Fields will be inspected after the seed head emerges.

Note on the application (map) the approximate harvest date to ensure that inspections are conducted prior to harvest on early varieties.

All Allium spp. fields will be inspected once during the growing season for the following default diseases and pests:

- Downy mildew of onion *Peronospora destructor*
- Botrytis stalk rot *Botrytis aclada*
synonym: *Botrytis allii*
- Onion smut *Urocystis colchici*
synonym: *Urocystis magica*
synonym: *Urocystis cepulae*
- Onion yellow dwarf *potyvirus*

20 **Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).**

- Purple blotch Alternaria porri
- Asparagus rust Puccinia asparagi
- Sclerotinia rot Sclerotinia sclerotiorum
- Smudge Colletotrichum circinans
- Stem and bulb nematode Ditylenchus dipsaci
- White rot of onion Sclerotium cepivorum

BRASSICA SPP. (Cabbage, Cauliflower, Mustards, etc.): To be eligible for a State Field Inspection Certificate, Brassica spp. fields must be turned in for individual field inspection.

All Brassica spp. fields will be inspected by walking every ten to fifteen rows, depending on field size.

Note on the application (map) the approximate harvest date to ensure that inspections are conducted prior to harvest on early varieties.

Brassica spp. fields will be inspected once during the growing season for the following default diseases:

- Blackleg Leptosphaeria maculans
synonym: Phoma lingam
- Black rot of crucifers Xanthomonas campestris pv. campestris
- Crucifer bacterial leaf spot Pseudomonas syringae pv. maculicola
synonym: Pseudomonas maculicola

Special Note: Pursuant to IDAPA 02.06.13 - Rules Relating To Rapeseed Production And Establishment Of Rapeseed Districts In The State Of Idaho, Section 150 requires that all Brassica spp. seeds to be planted in Idaho meet the following requirements:

- Brassica spp. seeds shall be treated with an EPA and State registered fungicide for the control of blackleg (Leptosphaeria maculans synonym: Phoma lingam).
- Brassica seed lots produced outside Idaho shall be accompanied by a phytosanitary certificate stating that the seed is free (zero tolerance) from blackleg based on a laboratory test of a minimum of one and three-tenths (1.3) ounces or ten thousand (10,000) seeds.
- Brassica spp. seeds produced in Idaho are exempted from the requirements above.

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

- Testing can be done by the ISDA Plant Pathology Laboratory.

CARROT: To be eligible for a State Field Inspection Certificate, carrot fields must be submitted for individual field inspection.

Carrot fields will be inspected by walking every ten to fifteen rows, depending on field size.

Inspection will be done after seed head begins to emerge, but the tops are still green.

Carrot fields will be inspected once during the growing season, after the umbel begins to emerge, for the following default diseases:

- | | |
|------------------------------|--|
| ➤ Alternaria leaf blight | <u>Alternaria dauci</u> |
| ➤ Bacterial blight of carrot | <u>Xanthomonas campestris</u> pv. <u>carotae</u> |
| synonym: | <u>Xanthomonas hortorum</u> pv. <u>carotae</u> |
| ➤ Bacterial soft rot | <u>Pectobacterium carotovorum</u> pv. <u>carotovorum</u> |
| synonym: | <u>Erwinia carotovora</u> |
| ➤ Black rot of carrot | <u>Alternaria radicina</u> |
| synonym: | <u>Stemphyllium radicinum</u> |

RADISH: To be eligible for a State Field Inspection Certificate, radish fields must be submitted for individual field inspection.

Radish fields will be inspected by walking every ten to fifteen rows, depending on field size.

Inspections will be done when the plants' first flowers are opening.

Radish fields will be inspected once during the growing season for the following default diseases:

- | | |
|------------------------------|---|
| ➤ Bacterial blight of radish | <u>Xanthomonas campestris</u> pv. <u>raphani</u> |
| ➤ Black rot of crucifers | <u>Xanthomonas campestris</u> pv. <u>campestris</u> |
| ➤ Turnip/radish anthracnose | <u>Colletotrichum higginsianum</u> |

LETTUCE: To be eligible for a State Field Inspection Certificate, lettuce fields must be submitted for individual field inspection .

A minimum of 10,000 plants from five different areas of the field will be examined after the plants are up, but prior to bolting. A percentage of Lettuce mosaic virus infection will be determined.

The five areas of the field examined will include areas of increased plant stress to maximize the chance of observing lettuce mosaic virus.

Note the approximate planting date so that the optimum time for inspection can be determined.

Lettuce fields will be inspected once during the growing season for the following default disease:

- Lettuce mosaic *potyvirus* (LMV)

Some countries may require a field inspection for the following diseases. ***Disease must be specifically listed on the field inspection application (map) form to be inspected for in the field.**

*Lettuce leaf spot Septoria lactucae

*Tomato spotted wilt *tospovirus*

*Lettuce bacterial leaf spot Xanthomonas axonopodis pv. vitians

synonym: Xanthomonas campestris pv. vitians

VINE CROPS (Cucumis, Cucurbita, Citrullus, etc.): To be eligible for a State Field Inspection Certificate, fields of vine crops must be turned in for individual field inspection.

All fields will be walked every five to fifteen rows depending on field size and density of crop.

Fields will be inspected after flowering and fruits are beginning to form.

All fields will be inspected once during the growing season for the following default diseases:

- Angular leaf spot: Pseudomonas syringae pv. lachrymans

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

- Anthracnose: Colletotrichum orbiculare
 synonym: Colletotrichum lagenarium
 synonym: Gleoeosporium orbiculare
 synonym: Gleoeosporium lagenarium
 synonym: Glomerella lagenarium
- Bacterial fruit blotch of watermelon:
Acidovorax avenae subsp. citrulli
 synonym: Pseudomonas pseudoalcaligenes subsp. citrulli
- Bacterial leaf spot of cucurbits
Xanthomonas cucurbitae
 synonym: Xanthomonas campestris pv. cucurbitae
- Cucumber mosaic *cucumovirus* (CMV)

Some countries may require a field inspection for the following diseases. ***Disease must be specifically listed on the field inspection application (map) form to be inspected for in the field.**

- *Gummy stem blight Didymella bryoniae
 synonym: Mycosphaerella melonis
 synonym: Mycosphaerella citrullina
 synonym (anamorph): Phoma cucurbitacearum
- *Stem end rot of watermelon
Botryosphaeria rhodina
 synonym: Physalospora rhodina
- *Watermelon mosaic 2 potyvirus
 synonym: Watermelon mosaic virus
 synonym: Watermelon marrow mosaic
 synonym: Melon mosaic virus

PEPPER (Capsicum sp.): To be eligible for a State Field Inspection Certificate, fields of pepper must be turned in for individual field inspection.

All fields will be walked every five to fifteen rows depending on field size and density of crop.

Fields will be inspected after flowering and fruits are beginning to form.

All fields will be inspected once during the growing season for the following default diseases:

- Angular leaf spot Pseudomonas syringae pv. lachrymans

24 **Note:** Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

- Bacterial canker Clavibacter michiganensis pv. michiganensis
synonym: Corynebacterium michiganensis pv. michiganensis
- Bacterial spot Xanthomonas vesicatoria
synonym: Xanthomonas campestris pv. vesicatoria
- Cucumber mosaic *cucumovirus* (CMV)
- Pepper root rot Colletotrichum dematium
- Phytophthora blight Phytophthora capsici

Some countries may require a field inspection for the following diseases. ***Disease must be specifically listed on the field inspection application (map) form to be inspected for in the field.**

- *Bacterial speck Pseudomonas syringae pv. tomato
- *Fruit rot Diaporthe phaseolorum
synonym (anamorph): Phomopsis phaseoli
- *Southern bacterial wilt Ralstonia solanacearum
synonym: Pseudomonas solanacearum
- *Tobacco etch *potyvirus* (TEV)

MINT: Mint fields producing certified rootstock for sale must be submitted for a growing season inspection.

Fields meeting the requirements for disease/pest freedom as outlined in IDAPA 02.06.18 - Rules Governing Mint Rootstock and Clone Production will be eligible for In-state or Certified Defined Generation status for that year.

The mint inspection rules may be obtained from either the Boise or Twin Falls offices or the ISDA Homepage (<http://www.idahoag.us>).

“Certified” or “In-state” Defined Generation numbers of the parent rootstock must be included on the application (map).

Mint fields will be inspected twice during the growing season for the following default diseases:

- Mint root borer: Fumibotys fumalis
- Mint stem borer: Pseudobaris nigrina
- Verticillium wilt: Verticillium dahliae

POTATOES FOR EXPORT: Fields of potatoes for export must be turned in for individual field inspection to be eligible for a State Field

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

Inspection Certificate. No inspections will be done without a completed field inspection application (map) submitted to ISDA.

Individual field inspection may be done by ISDA or the Idaho Crop Improvement Association (ICIA). ICIA may only inspect fields which have been turned in for recertification.

Grower/shipper/broker must know the country of destination and phytosanitary requirements of that country.

Grower/shipper/broker must list on the application for field inspection (map) all pests and/or diseases that must be inspected for to meet the phytosanitary requirements of the country of destination.

Field must not be rogued prior to field inspection.

Field must be inspected during active growth of plants.

Country of destination may dictate time of inspection.

Taiwan requires field inspection when there are green tissues – prior to killing vines.

Grower/shipper/broker must notify ISDA in writing of the date of harvest to ensure the lot identity of the potatoes being exported.

SPECIAL FIELD INSPECTION REQUESTS: Contact ISDA for specific requirements and deadlines. No inspections will be done without a completed field inspection application (map) submitted to ISDA within the specified deadlines. Special field inspection requests will be handled on a case-by-case basis.

VII. FINAL INSPECTION REPORTS AND SEED INVENTORY:

At the end of the growing season, ISDA will print and send to each applicant a list of seed lot(s) submitted for field inspection. List includes:

- Species
- Variety
- Lot number
- Grower name
- Area number

26 **Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).**

- State number (after assigned)
- Diseases inspected for
- Number of acres
- Clean weight of crop (in pounds, if provided by the company)

Each company must provide ISDA with the clean weight for every seed lot.

Each company should carefully review the Crop Inspection Report for accuracy and typographical errors. **Corrections must be reported to ISDA immediately.**

No state numbers will be issued without an estimated clean weight. No in-state planting certificates (green tags) will be issued without an actual clean weight.

Split and combined lots must be indicated on the Crop Inspection Report including the clean weight and acreage for each split lot or total acreage and weight for each combined lot. **ISDA must be notified of split and combined lots prior to requesting phytosanitary certificates.**

Crop Inspection Report is signed by both ISDA and the person reviewing the report.

A Final Inspection Report will be printed after ISDA receives the actual clean weight for each seed lot.

ISDA maintains inventory records for all plant commodities inspected in the field by ISDA and crops inspected in the field by ICIA under the Phytosanitary Inspection Program. The company must provide an actual clean weight of each lot being shipped on a Federal Phytosanitary Certificate or a State Field Inspection Certificate when applying for the certificate.

If there are any questions regarding any of the seed crops listed, need an inspection for a crop not listed, or need applications (maps), please call the Division of Plant Industries at either the Boise office - (208) 332-8620; Fax. (208) 334-2283 or Twin Falls office - (208) 736-2195; Fax. (208) 736-2198.

This publication is also available on the ISDA Home Page at (<http://www.idahoag.us>).

Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

VIII. DIVISION OF PLANT INDUSTRIES CONTACTS:

TREASURE VALLEY:

IDAHO STATE DEPARTMENT OF AGRICULTURE
DIVISION OF PLANT INDUSTRIES
P.O. BOX 790
BOISE, ID 83701
TELEPHONE: (208) 332-8620
FAX MACHINE: (208) 334-2283

LAURA MORRIS, ADMINISTRATIVE ASSISTANT
EMAIL ADDRESS: lmorris@idahoag.us

LILA DAVIS, ADMINISTRATIVE ASSISTANT
EMAIL ADDRESS: ldavis@idahoag.us

KAY HAVER, TECHNICAL RECORDS SPECIALIST
EMAIL ADDRESS: khaver@idahoag.us

EOIN DAVIS, PROGRAM MANAGER
EMAIL ADDRESS: ebdavis@idahoag.us

MICHAEL COOPER, BUREAU CHIEF
EMAIL ADDRESS: mcooper@idahoag.us

TOM DAYLEY, ADMINISTRATOR
EMAIL ADDRESS: tdayley@idahoag.us

MAGIC VALLEY:

IDAHO STATE DEPARTMENT OF AGRICULTURE
DIVISION OF PLANT INDUSTRIES
P.O. BOX 401
TWIN FALLS, ID 83303-0401
TELEPHONE: (208) 736-2195
FAX MACHINE: (208) 736-2198

TINA EIMAN, TECHNICAL RECORDS SPECIALIST
EMAIL ADDRESS: teiman@idahoag.us

BRAD NEWBRY, SENIOR AGRICULTURAL INVESTIGATOR
EMAIL ADDRESS: bnewbry@idahoag.us

GARRY WEST, PROGRAM MANAGER
EMAIL ADDRESS: gwest@idahoag.us

28 Note: Inspections for diseases, beyond the default diseases noted, will need to be specifically listed on the application (map) form. Do not list default diseases on the application (map).

**NO INSPECTIONS WILL BE CONDUCTED
DURING THE RESTRICTED ENTRY INTERVAL
(REI) FOLLOWING A PESTICIDE APPLICATION.**

It is the responsibility of the person or company submitting the application (map) to notify the Idaho State Department of Agriculture (ISDA) of pesticide applications that have an REI by calling the Boise office at (208) 332-8620 or the Twin Falls office at (208) 736-2195.